

REMARKS

This submission is in response to the Official Action dated September 9, 2005. Claims 1, 2, and 4-10 are pending. Reconsideration of the above identified application, in view of the following remarks, is respectfully requested.

Applicant thanks the Examiner for the courtesies extended to Applicant's representative during the interview conducted on December 7, 2005. The substance of the interview is reflected in the remarks below.

Claims 1, 2, and 4-6 have been rejected under 35 USC 112, first paragraph, as failing to comply with the written description requirement. In the Office Action the Examiner took the position that the claims have been amended to contain subject matter which was not described in the specification at the time the application was filed. More specifically, the Examiner asserted that "said function checker outputting a predetermined control signal into said control unit when said function checker receives a predetermined signal from the various vehicle information data," as recited in amended claim 1, is not taught in the specification. It was the Examiner's position that part of this limitation (i.e., "said function checker outputting a predetermined control signal into said control unit") is taught on page 6, but that the specification does not teach "when the predetermined control signal is outputted by the function checker."

During the interview the Examiner agreed to withdraw this rejection. As explained by Applicant during the interview, page 6, lines 12-17, states the following:

When an "on" action signal, as the resultant of an "on" action of the ignition switch 13, is inputted into the F/C 22, the F/C 22 outputs a predetermined control signal to the control unit 10 via the communication line 24 and the connector 21, as shown with the left direction arrow line in Fig. 1.

(Emphasis added.) Thus it is clear that the predetermined control signal is output by the function checker (F/C 22) when an "on" action signal is inputted into the F/C 22. One of ordinary skill in the art reading the application as a whole would understand the "on" action signal to be the

claimed “predetermined signal from the various vehicle information data.” Thus the specification provides support for claim 1 as amended.

The Examiner has maintained the rejection of claims 1, 2, and 4-10 under 102(b) as being anticipated by Ishii et al. (U.S. Patent No. 5,552,488). Applicant continues to assert that the claims distinguish over this reference.

The present invention is directed to a control unit for a vehicle having a self-diagnosis function for self-diagnosing a verification of a reception of a signal concerning a switch based on various vehicle information data. Claim 1 has been amended to state that a function checker, which is connected by connecting means, outputs a predetermined control signal into the control unit when the function checker receives a predetermined signal from the vehicle information data (page 6, lines 12-26 of the Specification). The predetermined control signal causes the control unit to activate the self-diagnosis function automatically to establish a self-diagnosis mode (page 9, lines 21-18, of the Specification).

Ishii discloses a diagnosis apparatus for a vehicle control system including an electronic control unit (ECU) 51 and an external diagnosing unit 27 which can be connected to the ECU 51 via connector 28, e.g., by a service engineer when the vehicle is being inspected or repaired (Ishii, column 4, lines 52-61). There are two modes of self-diagnosis where one of the modes provides a diagnosis with higher precision (Ishii, column 5, lines 47-50). The operator performs a predetermined operation to the external diagnosing unit 27 so that the normal mode of the ECU 51 changes to the check mode (Ishii, column 5, lines 57-65). Ishii does not disclose that the external diagnosing unit 27 receives any signal from the any vehicle information data before the self-diagnosis mode changes to the check mode.

As asserted in the previous Response, Ishii does not disclose or suggest a function checker outputting a predetermined control signal, which is in response to receiving a predetermined control signal from various vehicle information data, and which causes the control unit to activate the self-diagnosis function, as set forth in claim 1. Ishii's ECU 51 receives data from the diagnosing unit 27,

such as a command to switch modes of the self-diagnosis program, e.g., a normal mode or a check mode, using a check mode flag CMF (Ishii, column 6, lines 40-47). However, this command does not cause the control unit to activate a self-diagnosis function, as set forth in the claims, but merely switches the self-diagnosis mode. Additionally, as shown in Fig. 3, the data is transmitted from the diagnosing unit 27 to the ECU 51 after the self-diagnosing routine already started, and therefore, the data cannot be used to activate the self-diagnosing routine.

The Examiner responds by stating that this limitation is not in the claim. Applicant disagrees. Claim 1 recites “said function checker outputting a predetermined control signal ..., wherein said predetermined control signal causes said control unit to activate said self-diagnosis function ...” Thus, this feature is in fact recited in claim 1.

Furthermore, as asserted in the previous Response, even if one were to construe that Ishii's command to change the self-diagnosis mode serves as a predetermined control signal of the present invention, Ishii's external diagnosing unit 27 does not receive any signal from the vehicle information data when the self-diagnosis mode changes to the check mode. Thus, Ishii does not disclose that the function checker outputs a predetermined control signal into the control unit when the function checker receives a predetermined signal from the various vehicle information data, as set forth in claim 1. Since the Examiner has not responded to this argument, Applicant reasserts it and requests the Examiner to respond to the argument or withdraw the rejection.

As also asserted in the previous Response, Claim 7 is directed to a control system including a control unit with a self-diagnosis function for verifying the reception of two signals from two separate switches. A function checker receives the first signal, and the function checker transmits a pseudo signal of the second signal to the control until when the function checker receives the first signal. The control unit activates the self-diagnosis function to establish a self-diagnosis mode when receiving the pseudo signal.

Ishii does not disclose that the control unit activates the self-diagnosis function for verifying the reception of two separate signals from two separate switches. Ishii's ECU 51 receives data from

various switches of the diagnosing unit 27 (Ishii, column 6, lines 32-34), but does not activate the self-diagnosis function to verify the reception of the various signals.

The Examiner responds by misquoting Applicant's argument, and then refers Applicant to column 5 and 6 and the drawings of Ishii. In misquoting Applicant's argument, the Examiner argues that Applicant asserted that Ishii "does not disclose that the control unit activates the self-diagnosis function." The Examiner left out the words "for verifying the reception of two separate signals from two separate switches," thereby addressing an argument Applicant did not make. Applicant reasserts this argument and requests the Examiner to provide a more appropriate response or withdraw the prior art rejection.

Furthermore, as asserted in the previous Response, Ishii does not disclose transmitting a pseudo signal of a second signal, which is transmitted from a second switch to a control unit, wherein the pseudo signal is transmitted from a function checker to the control unit when the function checker receives a first signal transmitted via a first communication line between the control unit and the first switch. The data that is transmitted from Ishii's diagnosing unit 27 to the ECU 51 includes the command to switch modes (Ishii, column 5, line 61, to column 6, line 3). However, if this data is construed as a pseudo signal of a second signal, as recited in claim 7, Ishii does not disclose a corresponding second signal transmitted from a second switch to a control unit. Ishii also does not disclose that this data is transmitted when a function checker receives a first signal transmitted from a first switch to the control unit. Since the Examiner has not responded to this argument, Applicant reasserts it and requests the Examiner to respond to the argument or withdraw the rejection.

For the aforementioned reasons, Ishii fails to teach or suggest all of the features of the present invention as set forth in claims 1 and 7. Claims 2-6 and 8-10 are dependent on claims 1 and 7 and are therefore also patentable for at least the same reasons.

In view of the above, Applicant believes the pending application is in condition for allowance.

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Respectfully submitted,

By 
Laura C. Brutman

Registration No.: 38,395
DARBY & DARBY P.C.
P.O. Box 5257
New York, New York 10150-5257
(212) 527-7700
(212) 527-7701 (Fax)
Attorneys/Agents For Applicant